

CLAIMS

1. A molding device for producing containers by blow molding or stretch blow molding from preforms made of a heated thermoplastic, said device comprising at least one mold (1) consisting of at least two half-molds (1a, 1b), mutually displaceable between an open position in which they are separated from one another and a closed position in which they are tightly pressed against one another by respective cooperating bearing faces (2a, 2b), defining a joint plane (3), the two half-molds (1a, 1b) having at least two respective corresponding edges (15a, 15b) of their respective bearing faces (2a, 2b) which are radially designed in the form of two mutually overlapping edges with respective opposing mating faces (16a, 16b) in the closed position of the mold, locking means (14) being functionally associated with said overlapping edges, characterized in that said locking means (14) are designed in the following manner:
- one of said overlapping edges (15a) located on the inside has a mating face (internal mating face) (16a) which terminates in a hook (17a) and which has a recess (18a) adjacent to the hook;
 - the other of said overlapping edges (15b) located on the outside has a mating face (external mating face) (16b) which terminates in a hook (17b) and which has a recess (18b) adjacent to the hook;
 - said respective hooks (17a, 17b) and recesses (18a, 18b) of said internal (15a) and external (15b) overlapping edges extend substantially over the entire height of the mold;
 - a gib (19) extending substantially over the entire height of the mold is mounted rotatably about a pin (20) corresponding to one of its edges in one of said recesses and in contact with the respective hook; and

- drive means are functionally associated with said gib (19) for pivoting about its pin (20) between two extreme positions,

whereby the gib (19) may occupy two functional positions, namely:

5 - a position inserted into its mounting recess in which the gib (19) does not engage the opposing recess of the other overlapping edge and allows a mutual relative displacement of the two half-molds (opening and closing of the mold); and

10 - a projecting position in which the gib (19) is pivoted toward the outside of its mounting recess and - the two half-molds (1a, 1b) being in the closed position - engages in the opposing recess of the other overlapping edge such that, when the two half-molds (1a, 1b) are subjected to forces separating them from one another (pre-blow molding, blow molding), said gib (19) is engaged with the two respective hooks (17a, 17b) of the two overlapping edges (15a, 15b) and

15 mechanically holds the two half-molds (1a, 1b).

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2. The molding device as claimed in claim 1, in which the mold (1) is of the jackknife type with the two half-molds (1a, 1b) mutually articulated in rotation on a shaft (8) substantially parallel to one side of the joint plane (3), characterized in that said locking means (14) are provided on the side of the mold opposing said shaft (8) of the two half-molds.

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30 3. The molding device as claimed in claim 1 or 2, in which each half-mold (1a, 1b) comprises a mold carrier (5a, 5b) to which is fixed internally a shell (6a, 6b) provided with a mold half-impression (4a, 4b), the joint plane (6) being defined by the two shells (6a, 6b) pressed against one another in the closed position of the mold, characterized in that the locking means (14) are supported by the two mold carriers (5a, 5b).

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4. The molding device as claimed in any one of claims 1 to 3, characterized in that the gib is supported by said internal overlapping edge.

5 5. The molding device as claimed in any one of claims 1 to 4, characterized in that the respective hooks (17a, 17b) of said two overlapping edges (15a, 15b) and the gib (19) extend continuously, substantially over the entire height of the mold.

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6. The molding device as claimed in any one of claims 1 to 4, characterized in that the gib (19) and at least the hook of the opposing overlapping edge extend discontinuously, substantially over the entire height of the mold.

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7. The molding device as claimed in any one of claims 1 to 6, characterized in that the gib (19) is supported in rotation, on or by its pin, with radial play.

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8. The molding device as claimed in any one of claims 1 to 7, this device being of the carousel type and mobile in rotation, characterized in that the drive means functionally associated with the gib (19) consist of at least one idler roller (24) supported, by means of a return mechanism, by one end of a rotating shaft of the gib, said roller being capable of cooperating with a fixed guide cam arranged laterally on the rotating carousel.

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9. The molding device as claimed in claim 8, characterized in that the drive means of the gib (19) consist of a return spring (25) capable of returning the gib (19) into said inserted position thereof.

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10. The molding device as claimed in claim 8, characterized in that the drive means of the gib (19)

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consist of a return spring (25) capable of returning the gib (19) into said projecting position thereof.

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